

OCCURRENCE OF BIRDS IN MADURA DISTRICT.

BY

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This is the first attempt to make a list of all the species of birds known to occur in Madura District, South India. The books on the subject are all vague with regard to distribution and relative abundance and altitudinal range. I hope these notes, which are a digest of many volumes of notes, will help compilers of future books to be a little more specific on some of these matters.

Madura District has seen few ornithologists. The great pioneer of South Indian birds, Dr. T. C. Jerdon, seems to have visited Madura City once or twice on his way from Trichinopoly to Tirunelveli, but he did not stop to collect here. Rev. S. B. Fairbank and Capt. Horace Terry did good work collecting on the Palni Hills, and the former also took a few specimens on the plains. Mr. Salim Ali's Travancore Survey worked along our western border, and from his list I have borrowed all records for Kumili and for Periyār Lake and its environs, because Madura District has about half a mile of shore-line on the lake at a place called Thēkadi near Kumili. Others who have done bird work in the District and whose specimens or records have helped me are: Major Campbell, on the Palni Hills in the 1830's; J. P. Cook, on the Palni Hills, at Kuruvannūthtu, and at Thēkadi from 1893 to 1896; R. F. Stoney, at Kodaikānal in 1899, and on the plains in 1903-4, 1915, and 1917; Dr. C. B. Harrison, at Madura in 1907; S. H. Prater, on the High Wavy Mts. in 1917; and C. McCann, on the Palni Hills in 1921. There are some local specimens in the Zoölogy Dept. of the American College, Madura. Mrs. Cantlay has sent me a good list of species observed on the High Wavy Mts., and various friends have given me occasional sight records. My own observations started in 1921-3, mostly at Kodaikānal. Since 1930, I have lived on the plains, stayed at Kodaikānal several weeks each year, and visited briefly most parts of the District. In my spare time I have accumulated all the records I could with the use of binoculars.

Madura District is in the middle of Tamil Nādu. It extends from 9° 31' to 10° 44' North, and its southern point is for a bird only 102 miles from Cape Comorin. On its eastern side it is at one point only 42 miles from Palk Bay. And its western point is 58 miles from the Indian Ocean.

While they are not sharply cut off from one another, there are different kinds of bird habitat in the District, which we may distinguish as follows:

1. The Coromandel *plains* sweep into Madura District from the north and east and south, and flow like a dry sea around the base of the hills. Roughly two-thirds of the District is plains, almost flat, but rising gently from 300 ft. above sea near Tirumangalam to over 1,500 ft. at Kūdalūr in the Kāmbam valley. There is very

little difference between the bird-life in different localities on the plains, but four kinds of habitat may be noted :

(a) For a large part of each year, the plains are fairly dry. Trees of many kinds are thinly scattered over them. The rainfall averages as low as 26 inches at Palni, and much of it falls from September to November. A bird partial to the *dry plains* only, is the Yellow-wattled Lapwing.

(b) There are small areas of *scrub jungle* and bushy waste-land on the little hills that rise here and there out of the plains, and at the base of the large mountain masses. Most of the birds of the dry plains are found in the scrub jungle in numbers, but the latter is particularly the home of the Jungle Warbler, the Malkoha, the Jungle Quail, and the Gray Partridge.

(c) Next there is the *wet zone*. If the north-east rains are good, much of the area of the plains comes for the season temporarily under this head, and all the irrigation tanks will have water in them for three or four months. But, the rains are irregular, and so the best place to look for the wet zone is on the lower Vaihāi plains near Madura City, which is served by the Periyār irrigation system from about June 15th to March 15th every year. The wet rice fields attract such birds as the Streaked Warbler, the Greater Spotted Eagle, and the Marsh Harrier.

(d) A few *large tanks* within the irrigated area have water in them for more than nine months of the year. Toward the end of this period, they have a thick growth of lotus, water-weeds, and sedges. Most of the water-birds naturally seek out such places, and there we find the Water Hens, Cormorants, Storks, large Herons, and Teals. But I have not yet found a heronry in the District.

2. Leaving the plains, we start up through the *dry hill slopes*, including the lower slopes of the Palni Hills where trees are small and few, and also the Varusha Nādu or upper Vaihāi valley, the Andippatti Hills, the Sirumalai slopes, and the lower hills flanking the Sirumalai. Peculiar to this zone are the Sirkeer Cuckoo and the Pea Fowl.

3. Higher up, we come to the tropical *rain-forest*. It surrounds Periyār Lake at the south-western corner of the District, and occurs on the High Wavy Mts. It folds itself around the slopes of the Kannan Dēvan Hills High Range, where Madura District includes a corner of that range. From there north-eastward there are larger or smaller blankets of forest on the Palni Hills, but the Lower Palnis, on their 4,000-foot plateau, show the forest at its best. And it jumps across the ten-mile gap of plains to rest again on the summit of the Sirumalai. Where it is cultivated, this zone has plantations of plantains, coffee, cardamoms, oranges, tea, etc. Birds peculiar to it are numerous; the Spotted Babbler, the Gold-fronted Chloropsis, the Black-naped Flycatcher, the Malabar Wood Shrike, the Racket-tailed Drongo, the Fairy Bluebird, the Grackle, and the Trogon, are a few of them.

4. Finally, there are the *temperate hill-tops*. From about 5000' up to the highest level in the District (8724' on the edge of the Kannan Dēvan Hills) there are open downs varied with small patches of woods called *shōlas*. The rainfall is 65 inches yearly at

Kodaikānal. To this zone are confined such birds as the Kodaikānal Laughing Thrush, the Shortwing, the Blackbird, the Red-headed Warbler, the House Swallow, the Jungle Nightjar, and the Painted Quail.

Considering the variety of life-zones in the District, it is not surprising to find that 331 species occur here out of a possible total of about 490 species in the whole of South India. Our great deficiency is in water-birds, for Madura District has 77% of the land-birds of South India, but only 45% of the water-birds.

The number of species found at each elevation in the District is approximately as follows :

5,000' and above	...	141
3,000' to 5,000'	...	187
1,000' to 3,000'	...	195
Plains	...	204

Out of our 331 species, I guess that 210 are permanent residents in some part of the District, 109 are winter visitors, and 2 (the White Ibis and Black-necked Stork) are summer wanderers. Of the winter visitors, some are water-birds that breed in winter, and so the number of species that breed in the District is probably over 220. There are curious gaps in my records of some of the Munias and Swifts, which may perhaps leave the District for part of the year.

The length of stay of our winter visitors varies greatly. A few species have been noted only in passage to and from Ceylon or Tirunelveli District, and these swell the figures for March. It is surprising to find that in an area so near the Equator the majority of winter visitors spend $5\frac{1}{2}$ months in Madura District, from mid-October to the latter part of March. The total number of winter visitors found in the District during each half-month is:

July 2nd half	6	Dec. 2nd half	65
Aug. 1st	13	Jan. 1st	66
" 2nd	16	" 2nd	67
Sept. 1st	28	Feb. 1st	65
" 2nd	32	" 2nd	62
Oct. 1st	40	Mar. 1st	63
" 2nd	55	" 2nd	62
Nov. 1st	54	Apr. 1st	50
" 2nd	61	" 2nd	27
Dec. 1st	62	May 1st	9

In the following list, the English names are the briefest I could find to distinguish the birds in our District from one another.

Tamil names have been printed only once, but apply to several species in most cases. If a species has no Tamil name next to it, the next previous Tamil name may be found applicable. The most helpful man on this subject is Mr. Bonavis Bonnell, M.A., Lecturer in Zoölogy at Madras Christian College.

In each case where I have used the third scientific name, I have done so to indicate that specimens have been taken in Madura District and the subspecies has been determined. Since the pub-

lished lists are not always clear on this point, I cannot vouch for the accuracy of the determination in all cases. If no specimen from Madura District has been scientifically determined, I have added a note to show the nearest place where the subspecies has been determined from specimens.

Records in parentheses are those from nearby Districts which improve upon the Madura District records, either in altitudinal range or in duration of stay.

The following 'farthest south' records are found in this list: Gray Babbler, Redstart, Orphean Warbler, Wire-tailed Swallow, Short-toed Lark, Singing Bush Lark, Griffon Vulture* and Tawny Eagle.

Corvus macrorhynchus. Black Crow. Tamil: *Andan kākai*, *Karun kākai*.

The subspecies is probably *culminatus*, which has been secured in Salem Dist. and in Travancore.

Plains, and around Thēkadi, 3000'. Fairbank also found this crow around some of the villages of the Upper Palni Hills as high as Vilpatti, 5800'. (In the Nilgiris up to 7200'.)

Resident.

It ranks 8th in abundance among the plains-birds, and is about one-fourth as numerous in my records as the House Crow. It avoids dense jungle, but is more a bird of the open country and the edge of the village. Its voice is lower in pitch than the House Crow's.

Corvus splendens. House Crow. *Maniyan kākai*.

Specimens of *splendens* have been taken in Trichinopoly Dist., and of *protegatus* in Travancore.

Plains only. (It ascends the Nilgiri hills.)

Resident.

Ranks first among the plains-birds. It is found not only around houses, but also in remote fields and along the shores of tanks.

Dendrocitta vagabunda parvula. Indian Pie. *Vāl kākai*.

The subspecies *vernayi* has been taken in Salem Dist., and I suspect our plains-birds belong to it.

Plains, and lower hills as high as 5000'.

Resident.

Fairly common, wherever there are sizable trees. As many as 10 may be seen together. Its trumpet-like calls are various, most often of 2 or 3 ascending notes: *ku-hee* or *ku-lo-hee*.

Dendrocitta leucogastra. Southern Pie.

J. P. Cook took a specimen at Thēkadi, 3000'. (In other districts, it occurs in damp forests up to 5000'.)

Parus major stupae. Gray Tit. *Pattāni kuruvi*.

From 1000' up to 7000' in all the hills. (From sea-level at Madras.)

Resident.

Rare, usually found in tree-tops on the edge of forest. Its clear, loud notes are somewhat less shrill than a Sun-bird's, usually 3 notes in a phrase.

Macholophus xanthogenys travancorensis. Yellow-cheeked Tit.

From 3000' to the top of the western hills. (Down to 2000' elsewhere.)

Resident.

Fairly common, in parties up to 10 in number, in trees. Its notes are loud and cheerful, usually of 3 syllables, much like the Gray-headed Flycatcher's in quality.

*Probably Long-billed Vulture (*G. indicus*) Eds.

Sitta frontalis frontalis. Velvet-fronted Nuthatch. *Pasai edukira kuruvi.*

Hills, from the base (Fairbank), to the top.

Resident.

Common in forests of the lower hills, fairly common at the top. Often found in groups of about 12, on the bark of large trees.

Garrulax delesserti. Wynaad Laughing Thrush. *Pūn kuruvi.*

The late Mr. F. Dawson found a nest near Pillar Rocks in 1935, and was sure that the bird was a Laughing Thrush without a white eyebrow. I have only one imperfect observation, also above 7000'. (Occurs in thick forest at all elevations in other districts.)

Trochalopteryx jerdoni fairbanki. Kodaikānal Laughing Thrush.

Western hills, from 3500' up. (As low as 3000' in the Ānaimalais.)

Resident.

Abundant, ranking 3rd among Kodaikānal birds. Rev. S. B. Fairbank discovered this subspecies at Kodaikānal in 1867. It skulks in thick shrubbery. The notes are loud and ringing. The laugh is a deliberate *har, har, har*. . . A common call is *ku-hi-yu*, repeated several times. A low-pitched scolding resembles that of the Red-whiskered Bulbul.

Turdoides somervillei malabaricus. Jungle Babbler. *Thavittu kuruvi, Pandri kuruvi.*

Birds of the eastern plains are noticeably paler, and probably belong to the race *orientalis*, which has been taken in Mysore.

Plains, and up to 6100' in the hills. (In other districts up to 6500'.)

Resident. Terry found a nest at Pallangi, 5500'.

Fairly common. Flocks of about 7 are found where there are plenty of shade-trees and bushes on the plains. In the lower hills I have seen flocks of about 25. On the plains, I have heard little screams, and a series of squeaky whistles in descending scale. In the hills, the notes are much louder and harsher, and remind one of fruit-bats.

Argya caudata caudata. Long-tailed Babbler.

Plains, and up to 1200' in the hills. Found near Āththūr, near Nilakōttai, and scattered from these points south-westward to the foot of the High Wavy Mts. (As high as 2500' in Mysore.)

Resident.

Uncommon, in flocks of about 10, in scrub jungle or rows of bushes between fields.

Argya malcolmi. Gray Babbler.

Lower Palni Hills, from 2800' to 5000'. This is the southern limit of the species.

Resident.

Fairly common. Terry obtained a specimen on the northern slope near Palni. In small flocks in open bushy places.

Argya subrufa. Rufous Babbler.

A specimen has been taken at Thēkadi, 3000'. Bunker and I saw three at Pallangi, 5400'. (In other districts it is resident from 200'.)

Pomatorhinus horsfieldii travancorensis. Scimitar Babbler.

Possibly our Sirumalai birds belong to the form *maderaspatensis*, which has been taken in Salem Dist.

From 1500' to the top of all the hills.

Resident.

Common at Kodaikānal. Found in underbrush and the lower branches, in thick forest, often in parties of about 5. The 3 or 4 notes on the same pitch are almost Barbet-like in tone. The call is a rattling note louder than that of the Laughing Thrush.

Dumetia hypertyra albogularis. White-throated Babbler.

From 1200' up to 4600' in the Palni and Sirumalai Hills. (In other districts it occurs lower, and also as high as 6000'.)

Resident.

Uncommon, in small groups in dense thickets. I have heard a clear whistled song of 7 notes, a titting call, and a soft *tack-tack* like two pebbles tapped together.

Chrysomma sinensis. Yellow-eyed Babbler.

Specimens taken in Salem Dist. belong to the typical *sinensis*.

From the base of the hills up to 3800'. (In the Nilgiris as high as 5500'.)

Resident.

Uncommon, but a little more common than the White-throated. Found in parties of up to 8 birds, in scrub jungle. I have heard a low-pitched twittering warble, some clear Iora-like whistles, and a low chirping.

Pellorneum ruficeps. Spotted Babbler. *Saruhamni kuruvi*.

Travancore specimens belong to the race *granti*, but those from Salem Dist. are of the typical *ruficeps*.

From the base of the hills up to 6200'.

Resident.

Fairly common. They are shy birds, seen singly in thick undergrowth usually on the ground. A common call: 'I'm *right* here', is tiresomely repeated, like an Iora. A song consists of loud clear notes in descending scale: 'He did, he did, he did do that', repeated two or three times.

Alcippe poiocephala poiocephala. Quaker Babbler.

In the western hills from 2200' to 6000'. (From the plains to 7000' in other districts.)

Resident.

Fairly common in my records, common on the High Wavy Mts. according to Mrs. Cantlay. As many as 8 together, among the branches on the edge of dense forest. The song is a cheerful, clear warble of about 10 notes, almost oriole-like.

Rhopocichla atriceps bourdilloni. Black-fronted Babbler.

Hills, from 1000' to 5000'. (In other districts as high as 6000'.)

Resident.

Uncommon, found in groups of about 12, in dense thickets.

Aegithina tiphia multicolor. Iora. *Māmbala chittu*.

The Central Indian race, *humei*, has been taken in Salem District, and probably occurs on our plains.

Plains, and in the hills as high as 4800'. (In other districts as high as 5500'.)

Resident.

Common, in shady trees.

Chloropsis aurifrons. Gold-fronted Chloropsis. *Pachai kuruvi*.

Sālim Ali took specimens of the Ceylon race, *insularis*, in Travancore: Western hills, from 1800' to 4000'. (Elsewhere, from 200' to 4500'.)

Resident.

Rare, in thick trees.

Chloropsis jerdoni. Jerdon's Chloropsis.

Plains, and up to 4800' in the hills, where Fairbank obtained a specimen and I also have observed them well.

Resident.

Uncommon. Found usually in small flocks in groves of mango and other thick trees.

***Micropsalis tenebrosa ganesa*.** *Karuppu kondai kuruvi*. Black Bulbul.

Western hills, from 2400' up to the hill-tops. (In other districts, as low as the foot of the hills.)

Resident.

Common, in flocks of up to 40, in the tops of tall trees far from houses. One call often heard is: *chirp, chee-chee-chee*.

***Molpastes cafer cafer*.** Ceylon Bulbul. *Kondai kuruvi*.

Plains, and up to 6500' in the hills near Kodaikānal.

Fairbank, Terry, and Dawson found it occasionally at the top.

Resident.

Abundant, ranking 4th among our plains-birds. Found wherever there are small trees and bushes.

***Otocompsa jocosa*.** Red-whiskered Bulbul.

Specimens from Rāmēswarem and Travancore indicate that our subspecies is *fuscicaudata*.

At all levels on the hills only. (In Rāmnād and Chingleput Districts it occurs also at sea-level.)

Resident.

Abundant on the higher hills, being first on the list at Kodaikānal. More numerous than the Ceylon Bulbul in most places in the lower hills. At the base, I have found it rarely in winter. Occurs in bushes in open places.

***Iole icterica*.** Yellow-browed Bulbul.

From 1000' to 7200' in the hills. (A specimen has been taken at sea-level on Rāmēswarem Island by Biddulph.)

Resident.

Fairly common, in flocks of about 40, in tree-tops in forests.

***Pycnonotus xantholaemus*.** Yellow-throated Bulbul.

Lower Palni Hills, from 2000' to 4000'. (As high as 5000' according to Stuart Baker.)

Probably resident.

I had a good observation of a group of 4 in thick undergrowth on Sep. 18. Rare.

***Pycnonotus gularis*.** Ruby-throated Bulbul.

Western hills, from 2400' to 3500'. (Records in other districts range from the foot of the hills up to 3750'.)

Resident.

Rare, in thick undergrowth.

***Pycnonotus luteolus luteolus*.** White-browed Bulbul. *Manjat kondai kuruvi*.

At Palni, I have seen this species on the plains 5 miles away from the foot of the hills. On the thinly-wooded slopes of the Sirumalai, it is found nearly up to 4000'. (Occurs at sea-level at Madras.)

Resident.

Common in dense scrub, though it avoids observation by staying in the center of bushes. The whistled notes are loud, tumbling, almost explosive.

***Microtarsus poioicephalus*.** Gray-headed Bulbul.

On the Palni Hills between 2400' and 3500'. (From 2000' to 4000' in other districts.)

Resident.

Rare. I have only 3 records, in the densest thickets.

***Brachypteryx major albiventris*.** Shortwing. *Kuruvai jettai kuruvi*.

From 5400' to the top of the Palni Hills. (In Travancore it occurs as low as 3000'.)

Resident.

Fairly common at Kodaikānal, where Rev. S. B. Fairbank discovered the subspecies in 1867. It occurs in dense forest, in bushes, rarely higher than 10 feet above the ground. About sunset it comes out into the open more. The song is higher and lighter than the Blackbird's. In contrast with the tame, mechanical effort of the Nilgiri Flycatcher, the Shortwing's song is wild and woody.

Tarsiger brunnea brunnea. Blue Chat.

My own record was at 1400' on the slope of the Lower Palni Hills. Sālim Ali took a specimen at Kumili, 3000'. (In other districts it occurs up to 5000'.)

Winter visitor. My record was on April 10. (Elsewhere it stays from mid-October to May.)

Rare.

Saxicola caprata nilgiriensis. Pied Bush Chat. *Kallu kuruvī.*

Specimens of the typical *caprata* have been obtained in Salem District, and so it may occur in the north-eastern part of Madura District.

I have seen birds on six occasions on the plains as low as 700', between July 7 and September 12 only. Otherwise, it is confined to the hilltops, and the open grassy slopes. (In Chingleput District, this species is found at sea-level all year.)

Resident on the hills.

Abundant at Kodaikānal, ranking 6th in my records. Rare below 4000'.

Phoenicurus ochruros. Redstart.

A specimen from the Nilgiris is assigned to the form *rufiventris*.

Plains, and up to 2800' in the Lower Palni Hills. (2900' in Mysore.)

Winter visitor, from Nov. 4 to Feb. 1. This is the southern limit of the range.

Rare. The call is a rapid series of about 6 chattering notes with a little squeak in them.

Saxicoloides fulicata fulicata. Indian Robin. *Kari kuruvī.*

Fairbank secured a specimen at the eastern base of the Palni Hills. The Pondicherry form, *ptymatura*, may perhaps occur on the plains in the eastern part of the district.

Plains, and up to 2000' in the hills. (Up to 6000' in other districts.)

Resident.

Common, especially in scrub jungle. The song is of 4 to 8 notes, shrill whistles gliding into each other, more wiry and less varied than the Magpie-Robin's.

Copsychus saularis. Magpie-Robin. *Pātkāri kuruvī.*

Specimens from Salem District belong to the typical *saularis*, while those from Rāmēswaram and Travancore belong to *ceylonensis*.

Plains, and up to 7000' in the hills, where a few are found at Kodaikānal.

Resident.

Common at the foot of the hills and in the lower hills, rare on the plains. Found among heavy trees in well-watered places.

Kittacincula malabarica. Shama Thrush. *Sōlai pādi.*

Specimens from Salem District and from Travancore belong to the typical form.

Between 1000' and 2000'. (Stuart Baker says 4000' is the upper limit.)

Resident.

Uncommon, in damp, dusky glades,—for example, along the pilgrim path on Alahar Malai. The song has the strength and vivacity, and much of the sweetness, of the Nightingale's.

Turdus simillimus bourdilloni. Blackbird. *Karun kuruvī.*

Palni Hills birds have the bill orange-red, the eye-ring a little duller, and the legs dusky-orange. Mr. Whistler says they are nearer to the Travancore

than to the Nilgiri race, *simillimus*. Dr. T. C. Jerdon said he had a specimen given to him by Major Campbell, who shot it on the Palni Hills, which did not differ from the typical *simillimus*. Terry thought he observed also the Black-capped subspecies, *mahrattensis*, and this is possible as a winter visitor, because specimens have been taken in Travancore.

From 3000' to the top of the hills. (In other districts down to 2500'.)

Resident.

Abundant on the higher hills, ranking 9th at Kodaikānal. Found in trees near houses, and also in remote shōlas. One form of song begins with 5 descending notes at intervals of half a tone. Often there is a combination of a long syllable next to a short one, as *coo-lee-lee* or *Eva*.

Geokichla wardii. Pied Thrush.

From 4000' to 7000' on the western hills. (May occur also on the plains.)

Noted only in March in migration. (Judging by records from other districts it should be found in October on its southward journey. Till April 7 in Mysore.)

Rare.

Geokichla citrina. White-throated Thrush.

The subspecies *cyanotis* has been taken in Salem District and in Travancore.

With S. K. Bunker, I saw one singing in a cardomom forest at 4200' in the Lower Palni Hills. (From 200' to 5000' in other districts.)

Probably resident.

The song is clear, loud, and vigorous, with some phrases very high-pitched.

Oreocincla dauma neilghiriensis. Mountain Thrush.

Western hills from 5000' to 7000'. (From 2000' up in the Nilgiris.)

Resident. Terry found a nest at Kodaikānal on June 7th. Mrs. Cantlay heard one singing on the High Wavy Mts.

Rare. I have seen only one.

Monticola cinclorhyncha. Blue-headed Thrush.

Western hills, from 3000' at Thēkadi up to 7800' near Kodaikānal. (Down to 2000' in N. Kanara.)

Winter visitor: October 23 to February 29. It should stay from early October to March 25.)

Rare.

Monticola solitaria. Blue Thrush.

Travancore specimens belong to the *pandoo* race.

From 900' to 7000' in the hills. (I have seen it at sea-level at Cape Comorin.)

Winter visitor, from September 28 to April 6, the latter by Bates. (April 21 is the departure date in Travancore.)

Rare. Single birds are fond of perching on rocks on the open slopes.

Myophonus horsfieldii. Whistling Thrush. *Sikāram*.

Western hills, from 1500' to 7500'. (In Travancore it occurs down to 500'.)

Resident.

Very common on the High Wavy Mts., according to Mrs. Cantlay. Fairly common along streams in the lower hills elsewhere.

Muscicapa parva albicilla. Red-breasted Flycatcher. *I pidippōn*.

Plains, and up to 7000' in the hills.

Winter visitor, from October 26 to April 4.

Rare in my experience, but Biddulph found it frequent. It is seen making short dashes from the lower branches of trees in open places. I have heard a long, somewhat squeaky, whisper-song; also, a low chattering trill; and a double *cluck* like hitting together two stones.

Muscicapula pallipes pallipes. White-bellied Flycatcher.

I have a few records in a dense grove along the Vaihāi River near Karupatti, elevation 500', from November 10 to February 14. In the lower hills it is found as high as 5500'. (Outside our district it has been noted as high as 6000'.)

Resident in the hills.

Uncommon, in undergrowth in thick woods. The song is high-pitched, so emphatic it is a little squeaky, divided into phrases of as many as 9 notes. I have heard 2 soft, tremulous notes, the second slightly lower in pitch; also a double call a little like the nasal call of the Paradise.

Muscicapula rubeculoides. Blue-throated Flycatcher.

The typical form has been obtained in Travancore.

I have seen only one bird, at 1500' on the northern slope of the Lower Palnis, April 10. It was in woods, close to the ground. (In Ceylon it occurs on plains and hills.)

Migrant. (Arrives in Ceylon in October.)

Muscicapula tickelliae tickelliae. Indian Blue Flycatcher.

1000' to 5400', and Fairbank recorded it also at the top of the Palni Hills. (Elsewhere, it has been found down to 200' elevation.)

Resident.

Uncommon, in thick bushes in or near forests. Its shrill song consists of 8 or 10 notes, a little richer in tone than the Gray-headed's, with a tendency to rise toward the end.

Eumylas albicaudata. Nilgiri Flycatcher.

From 4200' to the top of the western hills. (In other districts it occurs as low as 2000'.)

Resident.

Common at Kodaikānal, in the lower branches of large trees, and in bushes in shōlas. The call is a series of 4 or 5 sharp *chip's*.

Alseonax latirostris. Brown Flycatcher.

Plains, and up to 5000' in the hills.

Winter visitor, from July 29 to April 10 and rarely resident.

Fairly common, in trees. I have heard a weak whisper-song full of trills and squeaks. The call is 3 or 4 *chick's* in rapid succession, or a small, shrill squeak.

Alseonax ruficaudus. Rufous-tailed Flycatcher.

Sālim Ali took a specimen at Thēkadi, 3000'. (In Travancore, the range is from 2000' to 3500' elevation, and the stay is from November 27 to February 28.)

Alseonax muttui. Layard's Flycatcher.

Specimens from Travancore are assigned to the typical race.

I have one probable record, in the Lower Palnis on April 10. (In Travancore from 200' to 5500', between October and June.)

Ochromela nigrorufa. Black and Orange Flycatcher.

Western hills, from 4500' to the top. (As low as 2500' elsewhere.)

Resident.

Fairly common, in undergrowth in dense woods.

Culicicapa ceylonensis ceylonensis. Gray-headed Flycatcher.

From 2600' to the top of the hills. (In other districts down to 1000'.)

Resident.

Common. Active in the middle branches and open glades of forests. The head is not gray but dark-blue.

Tchitrea paradisi paradisi. Paradise Flycatcher. *Vāl kuruvi.*

Winter specimens from the Nilgiris have been assigned to the Himalayan form, *leucogaster*.

Plains, and as high as 5500', where Terry found it at Pailangi. (In other districts as high as 8000'.)

Winter visitor, from September 21 to April 13. (September 18 to April 23 in Tanjore District.) In July and August I have found a few at the base of the Sirumalai and Alahar Hills, where it is probably resident.

Fairly common, wherever there are shady trees. I have heard a song of 6 or 8 notes, somewhat low-pitched and squeaky. The call is a low, grating, nasal note: *queenk*.

Hypothymis azurea styani. Black-naped Flycatcher. *I pidippōn.*

Western hills, from 1200' to 4300'. (In other districts from the plains up to 5000'.)

My records fall between March 30 and June 22, but it is probably resident.

Uncommon, in thick undergrowth in forests. The song is clear but not loud, consisting of about 8 notes, of which the 7th is the highest and most emphatic. The call is a loud, excited, double squeak.

Leucocirca aureola. White-browed Flycatcher. *Visiri kuruvi.*

Specimens taken in S. Arcot and Travancore belong to the race *compressirostris*.

Palni Hills from 2700' to 4200'. (In other districts up to 6000'.)

Probably resident.

Rare, on thinly-wooded slopes.

Leucocirca pectoralis. White-spotted Flycatcher.

Specimens from Salem District and the Nilgiris belong to the typical form.

Terry called this far from common in the Putthūr valley on the north slope of the Palni Hills, but Mr. Whistler thinks this observation is unlikely to be correct. (Up to 6000' in the Nilgiris.)

Lanius vittatus. Bay-backed Shrike. *Kichān kuruvi.*

Plains, and up to 1000' on Nāha Malai. (In Mysore as high as 3300'.)

Resident.

Fairly common, especially among thorny bushes in dry open places. The grating, scolding note is not as loud as the Rufous-back's.

Lanius schach caniceps. Rufous-backed Shrike.

At all elevations.

Resident.

Common in open places, most numerous in cultivated areas on the plains and in the upper hills. Seen mating on February 12; young birds well grown on March 18.

Lanius cristatus. Brown Shrike.

The typical form has been taken in Salem District and in Travancore; Plains, and as high as 7100' in the hills.

Winter visitor, from August to April 23. (April 27 in other districts.)

Fairly common, especially during migration, when as many as 10 may be seen in a day. Perches conspicuously in open places. The harsh scolding notes are louder and more persistent than the Rufous-back's.

Hemipus picatus picatus. Pied Shrike.

Western hills from 2000' up. (Down to 500' in other districts.)

Resident.

Fairly common, in tree-tops in forest. As many as 6 in a flock.

Tephrodornis gularis sylvicola. Malabar Wood Shrike.

Western hills from 2400' to 4500'. (In districts to the west, it occurs from the plains to 6000'.)

Resident.

Uncommon, in flocks of about 12, in thick trees. The call is of 2 whistled notes followed by a soft snarl on a lower pitch.

Tephrodornis pondiceriana pondiceriana. Small Wood Shrike.

Plains, and up to 1200' in the hills. (Elsewhere up to 5000'.)

Resident.

Fairly common in leafy trees, singly or in small groups.

Pericrocotus flammeus. Orange Minivet. *Pot kuruvi, Māmbala kuruvi.*

Western hills, from the base to the summit. (Down to 200' elevation in Travancore.)

Resident.

Common in the lower hills, fairly common at Kodaikānal, rare at the base. Flocks are found in tree-tops in forests.

Pericrocotus peregrinus. Small Minivet.

Salem District specimens are the typical *peregrinus*, but those from Travancore are *malabaricus*.

Plains, and up to 5000' in the hills.

Resident.

Fairly common, in flocks of about 10, in tamarind and other leafy trees. In flight, they give a constant chorus of high, feeble whistles.

Lalage sykesi sykesi. Black-headed Cuckoo-Shrike.

Plains, and up to 4000' in the Palni Hills. (7000' in the Nilgiris.)

Winter visitor, from October 24 to April 14.

Rare resident. (Arrives October 15 at Tambaram.)

Fairly common in shady trees. The call is a lazy, buzzing snarl.

Graucalus javensis. Large Cuckoo-Shrike.

Specimens of the subspecies *macei* have been taken in Salem District and in Travancore.

Plains, and up to 4000' in the Palni Hills, the latter according to Fairbank.

Probably resident. In the hills my records are from Jan. to July, on the plains from November 12 to Feb 13. (Biddulph observed one on Rāmēswaram in October.)

Uncommon, in trees. I have heard a call somewhat like a paroquet's.

Artamus fuscus. Swallow-Shrike.

Plains, and at any elevation on the hills.

Resident.

Uncommon on the plains, fairly common between 4000' and 6000' in the Palni Hills. Flocks of about 12 perch on open branches and soar in the open.

Dicrurus macrocercus. Black Drongo. *Kari chān, Karuvāttu vāli.*

The subspecies *peninsularis* has been taken in Trichinopoly District, on Rāmēswaram, and in Travancore.

Plains, and open slopes up to 4000' in the Putthūr valley according to Terry. (On the Nilgiri plateau it is probably a winter wanderer.)

Resident on the plains.

Abundant on the plains, ranking 3rd in my records. Terry found it common on the slopes of the Palni Hills. Found in open country on conspicuous perches.

Dicrurus longicaudatus. Gray Drongo.

Plains, and hills as high as 7100'.

Winter visitor, from October 5 to March 30.

Uncommon, in mango groves, scrub jungle, and forests. The song, *ku-kwik*, *ku-ku*, *kwik*, is less varied than the other Drongos'.

Dicrurus coerulescens coerulescens. White-bellied Drongo.

Most records from the foot of the hills up to 4300'. (To 7000' in other districts.)

Resident in the hills.

Uncommon, usually found in scrub jungle. The notes are sweeter than the Black's, but not as loud or pleasant as those of the Bronzed.

Chaptia aenea malayensis. Bronzed Drongo.

Western hills, from the base to 5000'.

Resident.

Fairly common, in moderately heavy forest and along roads.

Dissemurus paradiseus malabaricus. Racket-tailed Drongo. *Erutthu vālan*, *Kondai kari chān*.

Hills, between 2000' and 4000'. (Up to 7000' in the Nilgiris.)

Resident.

Fairly common, but not as numerous as the Bronzed. Found in open spaces under the leafy roof of the forest. Some of the notes are squeaky, but others remind one of the Magpie-Robin or even the Shama.

Acrocephalus stentoreus brunnescens. Great Reed Warbler. *Kosu kattai*, *Nunni chirai*.

Plains, and up to 6100' in the western hills.

Winter visitor, from September 24 to May 2. (Resident in Ceylon.)

Fairly common in bushes near water.

Acrocephalus dumetorum. Olive Reed Warbler.

Plains, and up to 7000' at Kodaikānal.

Winter visitor, from August 27 to April 20, but Terry's Putthūr specimen was taken on June 26.

Fairly common, and more generally distributed than the preceding, in grain fields as well as near water. Though not as loud as the chattering calls of the Great Reed, the notes of the Olive Reed are more emphatic than the similar calls of the Tree Warbler.

Orthotomus sutorius. Tailor-bird. *Thaiyal chittu*, *Pon chittu*.

Specimens from Rāmēswaram and Salem District are placed in the Indian race, *guzurata*, but those from Travancore are closer to the Ceylon race, *sutorius*.

Plains, and up to 5500' in the hills. (To 8000' in Ceylon.)

Resident.

Common in scrub jungle and plantations on the hills. Found only in moist places on the plains.

Cisticola exilis erythrocephala. Red-headed Warbler. *Vayalān chittu*.

Upper Palni Hills above 5500'. (As low as 3500' in Mysore.)

Resident.

Fairly common on grassy downs where there are few cattle, as around the Kodaikānal reservoir. The first syllable is a nasal note like the twanging of a taut rubber-band; this is followed by a sweet double whistle.

Cisticola juncidis salimalii. Streaked Warbler.

In the Wynad and eastern plains, *curritans* is the subspecies found.

Plains, and Sālim Ali obtained the Travancore form at Kumili, 3000'. It is possible that Terry also saw this species near Kodaikānal. (In other districts as high as 7000'.)

Resident.

Fairly common, almost always seen in rice fields,

Franklinia gracilis albogularis. Gray-breasted Warbler. *Kosu kattai, Nunni chirai.*

From 2700' to 4800' in the hills, and also one uncertain record on the plains near Dindigul. (From sea-level in Ceylon it ranges up to 5000' in Travancore.)

Resident.

Uncommon, in tall grass or bushes near jungle. The song is a series of loud single chirp's.

Schoenicola platyura. Broad-tailed Warbler.

Western hills, from 3000' at Kumili up to 6800' at Kodaikānal.

Resident.

Rare, on steep bracken slopes.

Hippolais caligata. Tree Warbler.

A specimen of the typical form has been taken at Cape Comorin.

At all elevations.

Winter visitor, from September 3 to April 30.

Common, in trees and shrubbery, usually singly. I have heard a low-pitched, tuneless, chattering warble. The calls are a low *chack*, a chatter, and a throaty rattle.

Sylvia hortensis. Orphee Warbler.

The subspecies *jerdoni* has been taken at Bombay.

I have observed several well, in scrub jungle on the plains near Thēni, October 5 to March 22. This is the southern limit of its winter range.

Phylloscopus affinis. Yellow-bellied Warbler.

5500' to 7100' on the Palni Hills. (As low as 2800' in Mysore.)

Winter visitor, November 16 to April 25.

Fairly common in some seasons, in trees. The call is a *chack* somewhat like a Tree Warbler's.

Phylloscopus trochiloides viridanus. Greenish Warbler.

The Green Warbler, *trochiloides*, has also been taken in Salem District and Travancore.

Plains and hills at all elevations.

Winter visitor, September 21 to May 20. (The Green Warbler has been collected in Travancore in July.)

Common in tree-tops, especially during migrations. The song is a loud, clear warble, 'willowy, willowy, willowy', up to about 16 notes.

Phylloscopus magnirostris. Large-billed Warbler.

Sālim Ali found it at Periyār Lake, 3000'. (In other districts, from 2000' to 4000'.)

Winter visitor. (November 15 to March 7 in Travancore.)

Phylloscopus occipitalis occipitalis. Large Crowned Warbler.

Western hills, from 3000' at Kumili up to 7000' at Kodaikānal. (In Salem District it has been recorded also on the plains.)

Winter visitor, from February 28 to April 21. (Arrives November 19 in Mysore.)

Rare, in trees.

Prinia socialis socialis. Ashy Warbler.

Plains, and up to 7000' in the hills.

Resident.

Fairly common in grain-fields on the plains, common on bracken slopes just below Kodaikānal.

***Prinia sylvatica sylvatica*.** Jungle Warbler.

Plains, and up to 4700' in the Palni Hills.

Resident.

Common in scrub jungle at the base of the hills, rare elsewhere. A loud triple note repeated several times, more emphatic than the similar double note of the Tailor-bird.

***Prinia inornata franklinii*.** Indian Warbler.

Specimens of *inornata* have been taken in Trichinopoly District.

Plains, and up to the top of the hills.

Resident.

Very common in grain-fields on the plains, and also on bracken slopes on the Palni Hills. The song is rougher and more insect-like than that of the Ashy; is usually starts with a little click: *tlik*. . . .

***Irena puella puella*.** Fairy Bluebird. *Pana kāra kuruvi*.

Western hills, from the base up to 4200'. (To 5000' in other districts.)

Resident.

Uncommon, in tree-tops in thick forest. The notes are loud and clear. One bird repeated, 'chip her', over and over.

***Oriolus oriolus kundoo*.** Golden Oriole. *Manjal koluppan*.

Plains, and up to 4400' in the hills. (In other districts as high as 6000'.)

Winter visitor, from October 24 to April 13. (From September to June in Cochin State.)

Fairly common, in trees along roads or in gardens. The song is a clear, liquid rendering of the name 'oriole', but there are often 5 syllables and some harsh notes as well. A single grating note is the one most often heard in winter.

***Oriolus xanthornus maderaspatensis*.** Black-headed Oriole.

Hills, from the base up to 5000'. (From sea-level at Madras it ranges up to 7000' in the Nilgiris.)

Resident.

Fairly common in heavy trees. A common call may be written *krark*.

***Gracula religiosa indica*.** Grackle. *Naiyāndi kuruvi*.

2500' to 5000' in the hills. (Found also in the low country of Ceylon.)

Resident.

Common in tree-tops in plantations and light forest. In addition to the loud clear cries, there are conversational notes which sound like Donald Duck's voice in the talkies!

***Pastor roseus*.** Rosy Starling. *Sūrai kuruvi*, *Chōlam batchi*.

Plains, and up to 3000' at Kumili.

Winter visitor, from October 21 to April 12. (In other districts the species arrives in August and stays until May.)

Dense flocks contain up to 400 birds, and are found in open country and fruiting trees. Fairly common.

***Sturnia malabarica malabarica* and *S. m. blythii*.** Gray-headed Myna.

Specimens of both subspecies were taken by Cook at Thēkadi.

Winter visitor to the plains from November 6 to March 10. (The Northern form stays until April 9 in Travancore.) Probably the Southern form, *blythii*, is resident at Periyār Lake.

Compact flocks are found in trees, like Starlings. Uncommon. In winter, the commonest call is a mild single whistle, a little tremulous.

***Temenuchus pagodarum*.** Brahmany Myna. *Pāppāthi nāhanavāy*.

Plains, and occasionally on the High Wavy Mountains up to 5000'. (In the Nilgiris the upper limit is 7000'.)

Resident.

Fairly common in the wetter portions of the plains, sometimes near houses. Flocks of up to 60 are sometimes seen with Rosy Starlings in winter. The song is soft and rambling, made up mostly of pleasant, warbling notes.

***Acridotheres tristis tristis*.** Common Myna. *Nāhanavāy*.

Plains only. Fairbank thought that this species was common about villages in the Lower Palnis at 4000', but I have found only Gray Mynas there on frequent visits. (In Coorg the Common Myna wanders up to 3750' in company with Gray Mynas in winter.)

Resident.

Second only to the House Crow on the plains, about houses and in remote fields. Its falsetto laugh is a little sharper than the trill of the White-breasted King-fisher. The syllables *keedle* often recur in the song.

***Aethiopsar fuscus*.** Gray Myna. *Kāttu nāhanavāy*.

The subspecies *mahrattensis* has been taken in Salem District and Travancore.

From 1000' at the foot of the hills, up to 7600' at Kodaikānal. In 1923 the species had not yet reached Kodaikānal but was found at Kavunji, 6400'. By 1931 it was found as high as there are houses at Kodaikānal. (In Travancore it occurs down to sea-level.)

Resident.

Fifth in abundance in my Kodaikānal list, and abundant also in the lower hills. It is a bird of villages and open places more than of jungle, and nests in buildings as much as the Common Myna does. The notes are rougher and less pleasant than those of the Common.

***Ploceus philippinus philippinus*.** Weaver-bird. *Thūkkanan kuruvi*, *Thonganathān*.

Plains only. (The Travancore form ascends the hills to 3000'.)

Resident.

Common in many places, usually nesting in colonies in coconut or thorn trees. When grain is ripe, flocks of weavers give employment to many small boys. Seen building nests from June 27 to September 19. Carrying flying termites to nests on October 7. The most distinctive of its notes is a long, wheezy whistle, as if the bird were drawing its breath in.

***Munia malacca malacca*.** Black-headed Munia. *Thinai kuruvi*.

On the plains, at Dindigul and near the base of the Palni Hills; and as high as 7000' in the upper Palni Hills.

Resident, probably mainly in the hills. My plains records are on March 23 and between July 27 and Nov. 28.

Uncommon on the plains, fairly common according to Terry on the lower slopes of the hills toward Palni, rare on the upper hills. In flocks in grain fields. The flight-call is a triple chirp; another note is a mild, plaintive, little *ink*.

***Uroloncha striata striata*.** White-backed Munia.

From 1000' in the rice fields at the base of the hills, up to 4700'. (From the plains to 6000' in other districts.)

All my records fall between February 14 and November 20. Probably resident in the lower hills.

Fairly common, in flocks of as many as 40.

***Uroloncha kelaarti jerdoni*.** Rufous-bellied Munia.

Plains, and up to 7000' at Kodaikānal.

Probably resident. I have seen only three flocks on the plains, in June, December, and January. My records on the hills are in March, May, and June.

Uncommon, in flocks up to 20. Call: a high-pitched, nasal squeak.

Uroloncha malabarica. White-throated Munia.

Plains, and up to 6500' at Kodaikānal.

Resident. Seen building nests on Feb. 13.

The commonest of the plains-munias, occurring in flocks of as many as 60 birds. More fond of dry fields than other munias. Its notes are a twittering cheeping, a plaintive little whistle, a sharp *chip*, and a triple chirp.

Uroloncha punctulata lineoventer. Spotted Munia.

Plains, and western hills as high as 6600'. (In the Nilgiris it occurs up to 7000'.)

Resident. Seen carrying nest material from May 19 to August 27.

Fairly common, especially near water. The call is a brief, mild, rather husky whistle: *t'hee*.

Amandaya amandaya. Red Munia.

The typical form has been taken in Mysore.

5500' to 6900' in the Palni Hills. (As low as 2000' in Mysore.)

My four records and Terry's one were all between April and June.

Rare. The largest flock contained 20 birds. I have heard a high-pitched, musical twittering, and a husky squeak.

Carpodacus erythrurus roseatus. Rose Finch.

3000' to 8000' on the western hills. (Also on the plains in other districts.)

Winter visitor, from February 1 to May 1. (Other districts, November 22 to May 2.)

Rare. I have heard a thin squeak gliding upward.

Gymnorhis xanthocollis xanthocollis. Yellow-throated Sparrow.

Plains, and up to 900' on the Nāha Malai. (Ascends to 4500' in other districts.)

Resident.

Fairly common, in trees in farming areas. Flocks of hundreds gather in ripening grain fields.

Passer domesticus. House Sparrow. *Or kuruvi, Adaikala kuruvi.*

Specimens from Trichinopoly District and Travancore are of the race *indicus*.

Plains. Fairbank recorded the species in villages up to 5000', but I have not seen it above 1200' in the hills. (Occurs at all elevations in the Nilgiris.)

Resident.

Ranks fifth in abundance among the plains birds. Found about houses except when large flocks raid the grain-fields.

Riparia rupestris. Crag Martin. *Thahaivilān kuruvi, Ney kuruvi.*

Terry saw some at Putthūr, about 6000' elevation in the Palni Hills. I have only one doubtful record. (As low as 2000' in other districts.)

Perhaps a rare winter visitor.

Riparia concolor. Dusky Martin.

At Dindigul Rock, elevation 900', on the Nāha Malai, and in the western hills up to 6850'. (At all elevations in Travancore.)

Resident.

Uncommon, in groups of about 12 birds. The call is a soft grating sound.

Hirundo rustica. Eastern Swallow.

Subspecies *gutturalis* has been taken in Travancore.

Plains, and hills up to 1150' only. (In Mysore it occurs as high as 2900'.)

Winter visitor, from September 1 to April 19.

Common, flocks of thousands being seen on wires in October and April.

Hirundo javanica domicola. House Swallow.

3000' to the top of the western hills. (As low as 2000' in other districts.) Resident.

Common, ranking 10th in order of abundance at Kodaikānal. Often nests on verandahs.

Hirundo smithii. Wire-tailed Swallow.

A specimen from the Nilgiris belongs to the race *filifera*.

Plains only. (In other districts it occurs up to 5000'.)

Winter visitor, December 20 to March 19.

Rare. I have seen it near Madura City, which seems to be the southernmost record of the species.

Hirundo daurica. Red-rumped Swallow.

The subspecies *erythropygia* has been taken in Trichinopoly District and Travancore.

Plains, and as high as 6000' at Top Station. (In other districts as high as 8000'.)

Resident.

Uncommon, but sometimes as many as 60 in a flock, over towns or in wild places. I have heard a loud, low-pitched note like *cheer*, and a sparrow-like chirp, and a more nasal *queenk*.

Motacilla alba. White Wagtail. *Vannātthi kuruvi*, *Kulatthu kuruvi*.

The race *dukhunensis* has been obtained in Travancore.

Plains only, at Dindigul and Batlagundu. (Up to 5000' in other districts.)

Winter visitor, December 1 to March 4. (Arrives in November in other districts.)

Rare, beside tanks.

Motacilla maderaspatensis. Pied Wagtail.

Plains, and up to 7500' in the hills.

Resident.

Fairly common at tanks and ponds. When there is no water elsewhere, they enjoy even the iron water-tanks at railway stations. The clear whistled notes are sometimes run together rapidly in a brilliant song.

Motacilla cinerea. Gray Wagtail.

The race *casifica* has been taken in Salem District and Travancore.

All elevations.

Winter visitor, from August 27 to May 7. On the plains, it occurs chiefly during migrations. (In neighbouring districts, August 21 to May 22.)

Common on the hills.

Motacilla flava beema. Gray-headed Wagtail.

A local specimen seems to be *beema*, the Blue-headed, race. The Grey-headed, *thunbergi*, and the Short-tailed, *simillima*, have both been taken in Travancore.

Plains. (J. B. Primrose saw a flock of the Short-tailed at 5000' in Travancore.)

Winter visitor, September 15 to April 26.

Abundant in wet fields. Flocks contain up to a thousand birds. I think most of them are Gray-headed. The notes are rougher than the clear, shrill whistles of the Gray Wagtail, and also a bit plaintive.

Motacilla citreola. Yellow-headed Wagtail.

Specimens of *M.c. verae* have been taken in North Kanara.

Plains, at Batlagundu, December 20. (Up to 2000' in other districts.)

Rare winter visitor.

Dendronanthus indicus. Forest Wagtail.

3000' at Kumili up to 7000' at Kodaikānal. (As low as 200' in Travancore and Cochin.)

Winter visitor. My only record is October 23. (Arrives September 19 in Mysore; departure date in Travancore is April 21.)
Rare.

Anthus hodgsoni hodgsoni. Indian Tree Pipit. *Pul kuruvi.*

5200' to the top of the Palni Hills. (As low as 2000' elsewhere.)

Winter visitor, October 25 to May 4. (Arrival date outside our district is September 19.)

Fairly common under thick trees into which it flies when alarmed.

Anthus nilghiriensis. Nilgiri Pipit.

4000' to the top of the Palni Hills. (Down to 3000' in Tinnevely District.)

Probably resident.

Fairbank and Terry called it common and secured specimens, but I find it hard to identify. Found on the open downs.

Anthus similis. Rufous Pipit.

The typical form has been taken in Travancore.

6000' to the top of the Palni Hills, according to Hume, but neither Fairbank nor Terry found it here. I have only 3 probable records, above 5500'. (In Travancore it occurs as low as 3500'.)

Probably resident.

Rare. In 1937, I called this species fairly common, but I now think most of the Kodaikānal birds are Indian Pipits.

Anthus richardi. Siberian Pipit.

Specimens of the typical form have been taken in Travancore.

Plains only. (Also in the hills in adjacent districts.)

Winter visitor, October 21 to April 12. (In other districts until May.)

I suspect it to be fairly common, but do not often dare to identify it unless native pipits are present for comparison.

Anthus rufulus malayensis. Indian Pipit.

Specimens were taken by Fairbank. The form found on the plains is more likely *rufulus*, specimens of which have been taken in Salem District and on Rāmēswaram.

Plains, and as high as 7000' at Kodaikānal.

Resident.

Common in grassy meadows and open fields. The song is a series of 5 to 20 *clink's*, often given in flight. The call is a thin, high whistle.

Anthus thermophilus. Daurian Pipit.

Plains only. (As high as 2500' in Mysore.)

Winter visitor, from November 22 to March 27.

Uncommon, on the ground in fallow fields and waste places, in flocks of about 20.

Alauda gulgula. Sky Lark. *Vānambādi.*

Specimens of *australis* have been taken in Travancore, and of *gulgula* in Ceylon.

On the plains, it is found throughout the better-watered parts of the Vaihāi and Kambam valleys. On the hills, it occurs on grassy hill-tops.

Resident.

Fairly common where found on the plains, common on the downs on the upper hills. The song has trills, long-drawn whistles, rapid staccato passages, metallic *clinks*, all in a continuous stream of sound lasting several minutes, during which the bird is fluttering slowly upward on a slant.

Calandrella brachydactyla. Short-toed Lark.

The subspecies *dukhunensis* has been taken on the Godavari delta.

Plains, near the Vaihāi River. This is the southern limit.

Fairly sure records extend from October 31 to March 8.

Uncommon. I have several times seen large compact flocks that were too shy to approach. I have heard a brief song of 6 or 8 *chip's*, slightly musical. The call is a single, soft, querulous note.

Mirafra javanica. Singing Bush Lark.

The race *cantillans* has been taken in Bhopal.

Plains, where I have one record near Viruppākshi, latitude 10° 28'. (Stuart Baker says the species occurs as far south as Travancore, but Whistler finds no definite records south of Mysore.)

Winter visitor, February 12.

Mirafra affinis ceylonensis. Madras Bush Lark. *Pul vānambādi.*

The specimen which Fairbank secured at Periyakulam belongs to the Ceylon race, but the birds of our eastern plains may be *affinis*, the eastern Madras form. Plains. (In other districts as high as 5000'.)

Resident.

Common in open grassy fields. The song consists of about 12 thin notes on one pitch.

Galerida malabarica. Crested Lark. *Kondai vānambādi.*

5500' to 7500' on the Palni Hills. (As low as 2000' in other districts.)

Resident.

Uncommon, on open downs.

Ammomanes phoenicura. Rufous-tailed Lark. *Vānambādi.*

The typical form has been taken in Trichinopoly and Coimbatore Districts.

Plains, and small hills up to 1100'. My southernmost record is at Kalluppatti near Tirumangalam. (Rāmēswaram is the only place where the species has been recorded farther south. As high as 2800' in Mysore.)

Winter visitor, September 12 to April 19. (Biddulph's Rāmēswaram records cover the period from May to October, suggesting that our birds migrate eastward to the coast during the southwest monsoon. Resident in Mysore.)

Uncommon, found in dry, rocky places, often singly. I have heard a flight-song of about 10 syllables, a bit husky and low-pitched. The calls are a sweet, thrush-like *tee-hoo*, and a low, husky whistle, and a low chirp.

Eremopteryx grisea grisea. Ashy-crowned Lark. *Manal vānambādi.*

Plains, and up to 1200' on rocky hillocks. (In Ceylon it occurs up to 7000'.)

Resident.

Common on the ground in dry places. A prolonged, mournful, clear whistle, together with a sweet little trill, make up the song, given while the bird soars and dips over a limited area.

Zosterops palpebrosa nilgiriensis. White-eye. *Kannādi kuruvi.*

Specimens of the race *salimalii* have been taken on the Shevaroyes.

1200' to the top of all the hills. (In Ceylon it occurs also in the low country.)

Resident.

Abundant on the upper hills, coming second only to the Red-whiskered Bulbul. Common on the lower hills. One flock at the foot of the hills in December. Found in flocks in trees and bushes. The song is a very light, fairy-like warble with a slight huskiness in it.

Cinnyris lotenia. Maroon-breasted Sunbird. *Pūn chittu, Thēn chittu.*

Plains. (Elsewhere the species occurs up to 5500'.)

Fairbank secured a specimen years ago at the foot of the Palni Hills on June 5, and I saw one at Dindigul on November 26.

Cinnyris asiatica asiatica. Purple Sunbird.

Plains, and as high as 5300' in the hills. (To 8000' in the Nilgiris.)

Resident.

Common around flowering trees and bushes.

Cinnyris minima. Small Sunbird.

2400' to 7200' on the western hills. (In Travancore the species descends to the foot of the hills.)

Resident in the lower hills. At Kodaikānal all my records come after May 13.

Fairly common. The call is a shrill chirp.

Cinnyris zeylonica. Purple-rumped Sunbird.

Plains, and into the hills as high as 7000' at Kodaikānal.

Resident, at least on the plains.

Very common on the plains, fairly common on the lower hills, one record at Kodaikānal. I have noted as many as 60 in a day.

Arachnothera longirostra longirostra. Spider-hunter.

1300' to 7000' on the western hills. (On the west coast it is also found in the low country.)

Resident.

Uncommon, in undergrowth near the edge of forest. The call is a loud, shrill *cheep*.

Dicaeum concolor concolor. Plain Flower-pecker. *Pūn kotthi*.

On the plains, I have one record at Periyakulam, $3\frac{1}{2}$ miles from the foot of the hills. It occurs at all elevations on the western hills.

Resident.

Very common, ranking 7th among Kodaikānal birds. Found in tree-tops, especially where there are parasitic plants. In addition to its familiar *check* calls, it sometimes gives a rapid series of *tick's*.

Dicaeum erythrorhynchos erythrorhynchos. Pink-billed Flower-pecker.

Plains, and Fairbank collected one on the side of the Palni Hills. I have seen a few at 6900' at Kodaikānal.

Resident.

Fairly common in thick trees. I have heard it give a high-pitched series of notes like mouse-squeaks.

Piprisoma agile. Thick-billed Flower-pecker.

Specimens of the typical race have been taken on the Nilgiris and in Travancore.

Plains, and lower hills up to 4000'. (In other districts up to 7000'.)

Resident, but March 16 is my only plains record.

Rare.

Pitta brachyura. Pitta. *Āru mani kuruvi*.

Plains, and up to 5000' in the hills. (To 7000' on the Nilgiris.)

Winter visitor, from October 10 to April 10, but Mrs. Cantlay reports that one spent most of a hot season in her garden on the High Wavy Mountains.

Rare, on the ground near thick trees.

(To be continued)